*This Crazy Field called Mathematics*

This assignment should read like a journal. I will pose a question, and I want you to answer it before moving on to the next question. In order to receive all the points, you need to demonstrate that you spent time thinking about each question. (Your answers do not have to be long. They just need to be complete.)

\*\*Note: I am having you read other people’s opinions. It doesn’t mean I agree with them or that you have to agree with them. I just found them thought provoking.

1. **Do you think mathematics is discovered, invented, or both? Why?**

[For our purposes, discovered means *to make known or visible*. That is, the idea was there. Someone just had to find it. Invented means *to produce for the first time through the use of the imagination or of ingenious thinking and experiment.*]

2. Read <http://www.scientificamerican.com/article.cfm?id=why-math-works> and explain Albert Einstein’s quote or Eugene Vigner’s quote.

3.Read <http://www.newton.dep.anl.gov/askasci/math99/math99117.htm> and write a summary of one of the responses.

Some other points to ponder:

There are concepts that have been developed on multiple continents at roughly the same time. Remember that communication between different civilizations was next to impossible.

A comment I read on a blog: Why are you so sure that numbers are invented? Is red a human invention? How about cold? If redness as a concept can be abstracted away from the collection of red things, and coldness as a concept can be abstracted away from the collection of cold things, then why can't threeness as a concept be abstracted away from the collection of collections of three things, without suddenly calling it "human invention"?

Do not answer question 4 until we have discussed it as a class.

4. After reading several people’s opinions, revisit the first question. **Do you think mathematics is discovered, invented, or both?** Give *specific* examples to back up your argument. [Your answer better have at least 5 quality sentences.]

Due Monday

Question 1: 2 points

Question 2: 1 point

Question 3: 2 points

Question 4: 5 points